

Farm, Rural, and Natural Resources Indicators

| | 1990 | 1995 | 2000 | 2001 | 2002 | 2003 | Annual percent change | | |
|--|--------|--------|---------|---------|----------|----------|-----------------------|---------|---------|
| | | | | | | | 1990-2000 | 2001-02 | 2002-03 |
| Cash receipts (\$ billion) | 169.5 | 188.0 | 193.7 | 202.8 | 193.5f | 200.5f | 1.3 | -4.6 | 3.6 |
| Crops | 80.3 | 100.8 | 94.1 | 96.4 | 97.6f | 101.6f | 1.6 | 1.3 | 4.0 |
| Livestock | 89.2 | 87.2 | 99.6 | 106.4 | 95.9f | 98.9f | 1.1 | -9.9 | 3.2 |
| Direct government payments (\$ billion) | 9.3 | 7.3 | 22.9 | 20.7 | 13.1f | 17.6f | 9.4 | -36.6 | 33.7 |
| Gross cash income (\$ billion) | 186.9 | 205.9 | 230.4 | 238.5 | 222.5f | 234.9f | 2.1 | -6.7 | 5.6 |
| Net cash income (\$ billion) | 52.7 | 52.5 | 58.4 | 59.7 | 46.3f | 51.3f | 1.0 | -22.5 | 11.0 |
| Net value added (\$ billion) | 80.8 | 74.8 | 92.1 | 90.9 | 76.5f | 90.8f | 1.3 | -15.9 | 18.7 |
| Farm equity (\$ billion) | 702.6 | 815.0 | 1,022.3 | 1,059.0 | 1,086.6f | 1,099.7f | 3.8 | 2.6 | 1.2 |
| Farm debt-asset ratio | 16.4 | 15.6 | 15.3 | 15.4 | 15.7f | 16.0f | -0.7 | 1.7 | 2.2 |
| Farm household income (\$/farm household) | 38,237 | 44,392 | 61,947 | 64,117p | 62,515p | 65,095f | 4.9 | -2.5 | 4.1 |
| Farm household income as a percentage of U.S. household income (%) | 103.1 | 98.8 | 108.6 | 110.2p | na | na | 0.5 | na | na |
| Nonmetro-Metro difference in poverty rates (% pts.) | 3.6 | 2.2 | 2.6 | 3.1 | na | na | -3.2 | na | na |
| Cropland harvested (million acres) | 310 | 302 | 314 | 311 | 307p | na | 0.1 | -1.3 | na |
| USDA Conservation Program Expenditures (\$ bil.) ¹ | 3.0 | 3.5 | 3.4 | 3.7 | 3.5q | na | 1.3 | -5.4 | na |

Food and Fiber Sector Indicators

| | | | | | | | | | |
|---|-------|-------|-------|--------|--------|----------------------|------|------|------|
| U.S. gross domestic product (\$ billion current) | 5,803 | 7,401 | 9,825 | 10,082 | 10,446 | 10,843f ² | 5.4 | 3.6 | 3.8 |
| Food and fiber share (%) | 15.1 | 14.2 | 12.6 | 12.3 | na | na | -1.8 | na | na |
| Farm sector share (%) | 1.4 | 1.0 | 0.8 | 0.8 | 0.8 | na | -5.4 | 0.0 | na |
| Total agricultural imports (\$ billion) ¹ | 22.7 | 29.8 | 38.9 | 39.0 | 41.0 | 46.0 | 5.5 | 5.1 | 12.2 |
| Total agricultural exports (\$ billion) ¹ | 40.3 | 54.6 | 50.7 | 52.7 | 53.3 | 56.0 | 2.3 | 1.1 | 5.1 |
| CPI for food (1982-84=100) | 132.4 | 148.4 | 167.8 | 173.1 | 176.2 | 179.0f | 2.4 | 1.8 | 1.6 |
| Personal expenditures on food as a percentage of disposable income (%) | 11.2 | 10.6 | 10.2 | 10.2 | 10.1 | na | -0.9 | -1.0 | na |
| Share of total food expenditures for at-home consumption (%) | 55.4 | 53.9 | 53.3 | 53.8 | 53.9 | na | -0.4 | -0.2 | na |
| Farm-to-retail price spread (1982-84=100) | 144.5 | 174.5 | 210.3 | 215.4 | 221.2 | na | 3.8 | 2.7 | na |
| Total USDA food and nutrition assistance spending (\$ billion) ¹ | 24.9 | 37.9 | 32.6 | 34.2 | 38.0 | na | 2.7 | 11.1 | na |

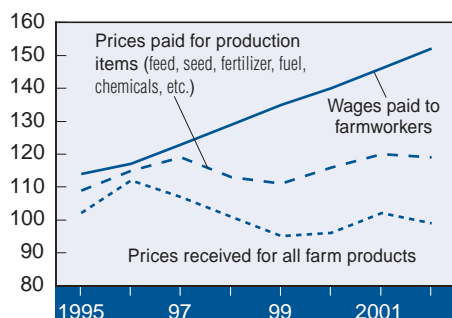
f = Forecast. p = Preliminary. q = 2002 Administration request. na = Not available.

¹ Based on October-September fiscal years ending with year indicated.

² Forecast for 2003 based on March 2003 forecasts from the Office of Management and Budget.

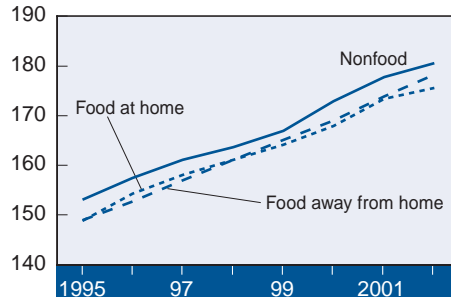
Prices paid and received by farmers

1990-92=100

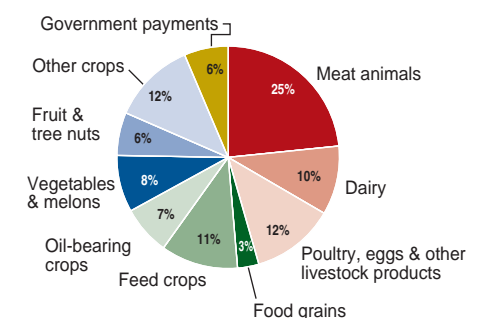


Consumer price indexes for food and nonfood items

1982-84=100



Cash receipts from farming in 2002



For more information, see www.ers.usda.gov/AmberWaves

Behind the Data

Growth in Postwar Agriculture: The Key Role of Productivity

Growth in agricultural output results from increased use of one or more inputs (capital, land, labor, and materials) and from growth in productivity, which reflects investments in research and development, extension, education, and infrastructure. Each input's contribution to output growth equals the product of the input's growth rate and its respective share of total production cost.

The output of U.S. agriculture grew 1.78 percent per year on average from 1948 to 1999. Increasing productivity accounted for 94 percent of growth in agricultural output, compared with 32 percent in the rest of the economy.

The singularly important role of productivity growth in agriculture is made all the more remarkable by the contraction in labor input. Over the full 1948-99 period, labor input declined 2.4 percent per year, on average. When weighted by its 0.25 share of total cost, the contraction in labor input contributed -0.61 percentage point per year on average to agricultural output growth.

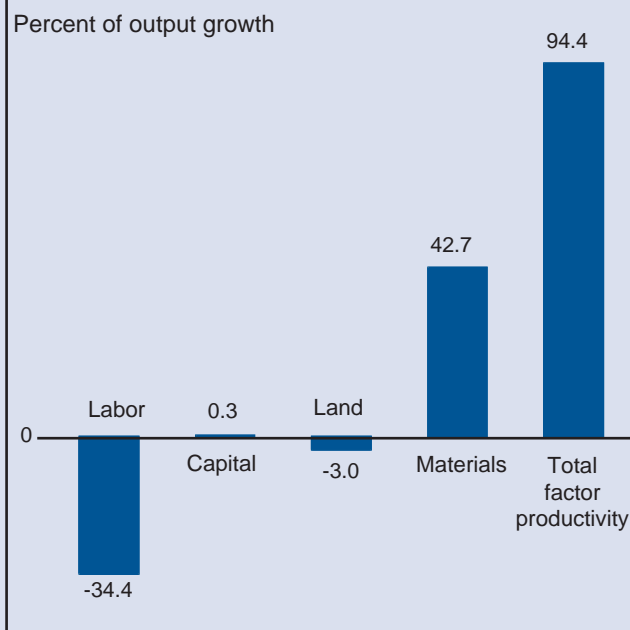
Land's contribution to growth in agricultural output was also negative, reflecting substitution of capital and materials for land. Over 1948-99, land contributed -0.05 percentage point per year to the sector's output growth.

Capital's contribution to agricultural output was generally positive, but small, averaging only a fraction of a percent. Material inputs, such as fertilizers, pesticides, and seeds, contributed a positive rate, averaging 0.76 percentage point per year to growth of output, enough to outweigh the negative contributions of labor and land.

When the net contributions of all four quantifiable inputs to agricultural output growth are accounted for over 1948-99, they explain only about one-tenth of 1 percentage point—less than 6 percent—of the average annual rate of growth. Even after accounting for changes in quality of the inputs—like the increased technology embedded in material inputs, the greater sophistication of capital inputs, and the greater skill and education embodied in people working on farms—changes in productivity alone emerge as the key component responsible for agricultural output growth.

Eldon Ball, eball@ers.usda.gov

Productivity growth was the single largest contributor to output growth in the U.S. farm sector, 1948-99



Sources of output growth in the U.S. farm sector

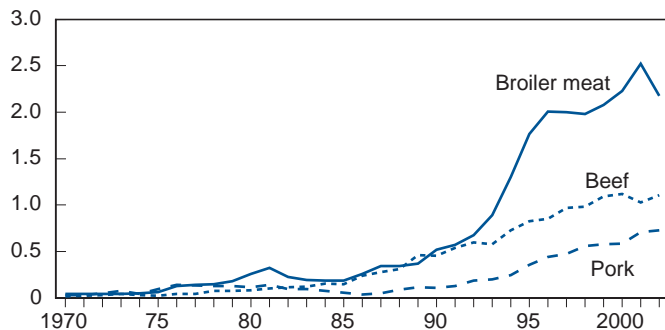
| Sources of growth | 1948-53 | 1953-57 | 1957-60 | 1960-66 | 1966-69 | 1969-73 | 1973-79 | 1979-89 | 1989-99 | Overall, 1948-99 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|
| <i>Weighted percentage point contribution to total output growth</i> | | | | | | | | | | |
| Labor | -1.11 | -1.01 | -0.72 | -1.05 | -1.01 | -0.27 | -0.69 | -0.40 | -0.09 | -0.61 |
| Capital | 0.58 | 0.16 | 0.06 | 0.11 | 0.37 | 0.15 | 0.36 | -0.56 | -0.24 | 0.01 |
| Land | 0.02 | -0.09 | -0.08 | -0.03 | -0.09 | -0.17 | 0.00 | -0.05 | -0.05 | -0.05 |
| Materials | 1.54 | 1.44 | 1.56 | 0.90 | 0.34 | 0.96 | 1.39 | -0.76 | 0.96 | 0.76 |
| Total factor productivity | 0.04 | 0.53 | 3.30 | 1.32 | 2.58 | 2.03 | 1.21 | 2.71 | 1.54 | 1.68 |
| <i>Growth rate (percent)</i> | | | | | | | | | | |
| Total output growth | 1.07 | 1.02 | 4.13 | 1.24 | 2.20 | 2.70 | 2.26 | 0.93 | 2.12 | 1.78 |

Source: ERS website on agricultural productivity at www.ers.usda.gov/data/agproductivity

Markets and Trade

U.S. meat exports have grown dramatically since the 1980s, especially broiler meat exports

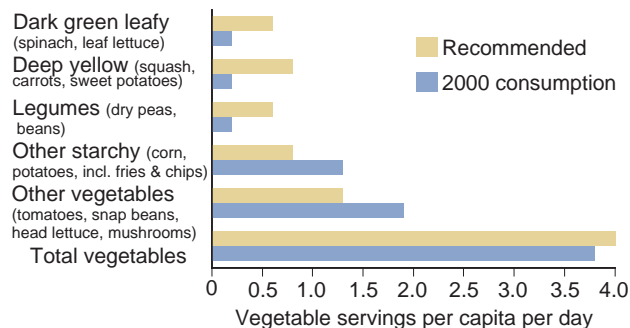
Mil. tons



Source: Compiled from data provided by USDA's Foreign Agricultural Service.

Diet and Health

Consumption of dark-green leafy and deep-yellow vegetables and legumes falls short of USDA Food Guide Pyramid recommendations

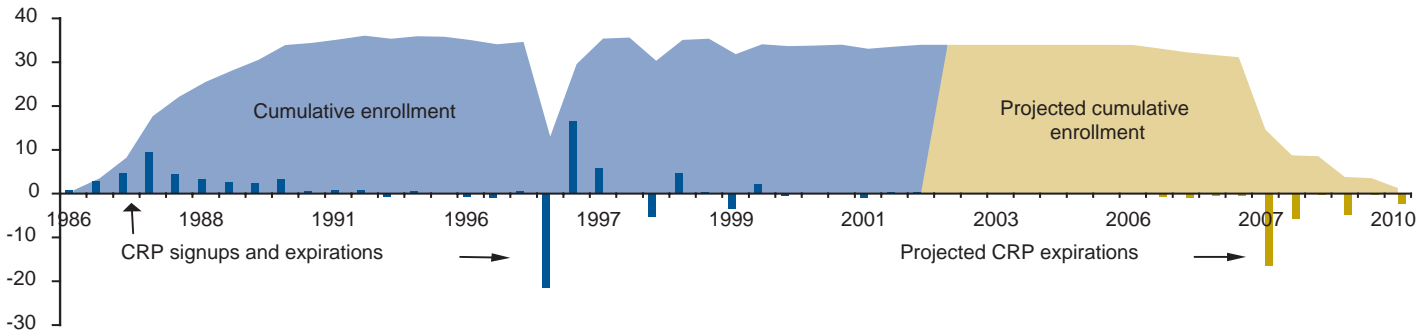


Consumption estimates based on food supply for domestic use.

Natural Resources and Environment

Enrollment in the Conservation Reserve Program (CRP) will likely continue at around 34 million acres until 2006, then begin falling unless the program is extended*

Mil. acres

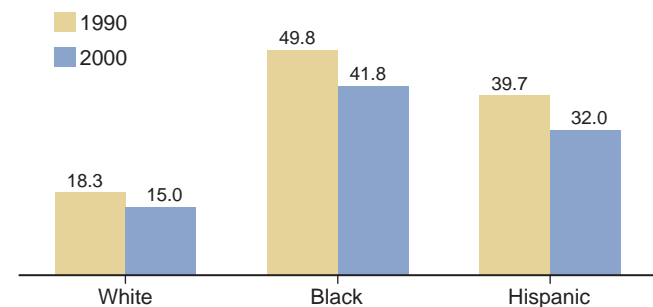


* Not including 2.8 million acres newly authorized in the 2002 Farm Act.
Source: Farm Service Agency data, USDA.

Rural America

Nonmetro child poverty rates declined between 1990 and 2000 for all racial/ethnic groups

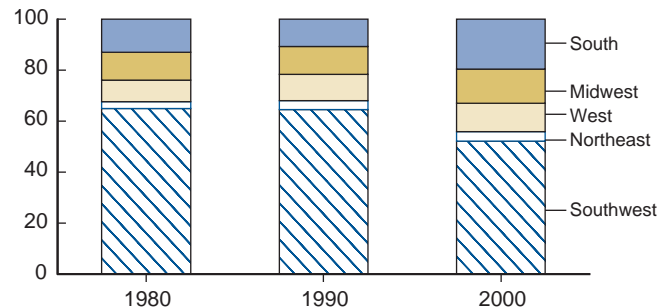
Percent of children in poverty



Source: Calculated by ERS from the 1990 and 2000 Census.

While the majority of U.S. Hispanics still reside in the Southwest, other U.S. regions have gained proportionately

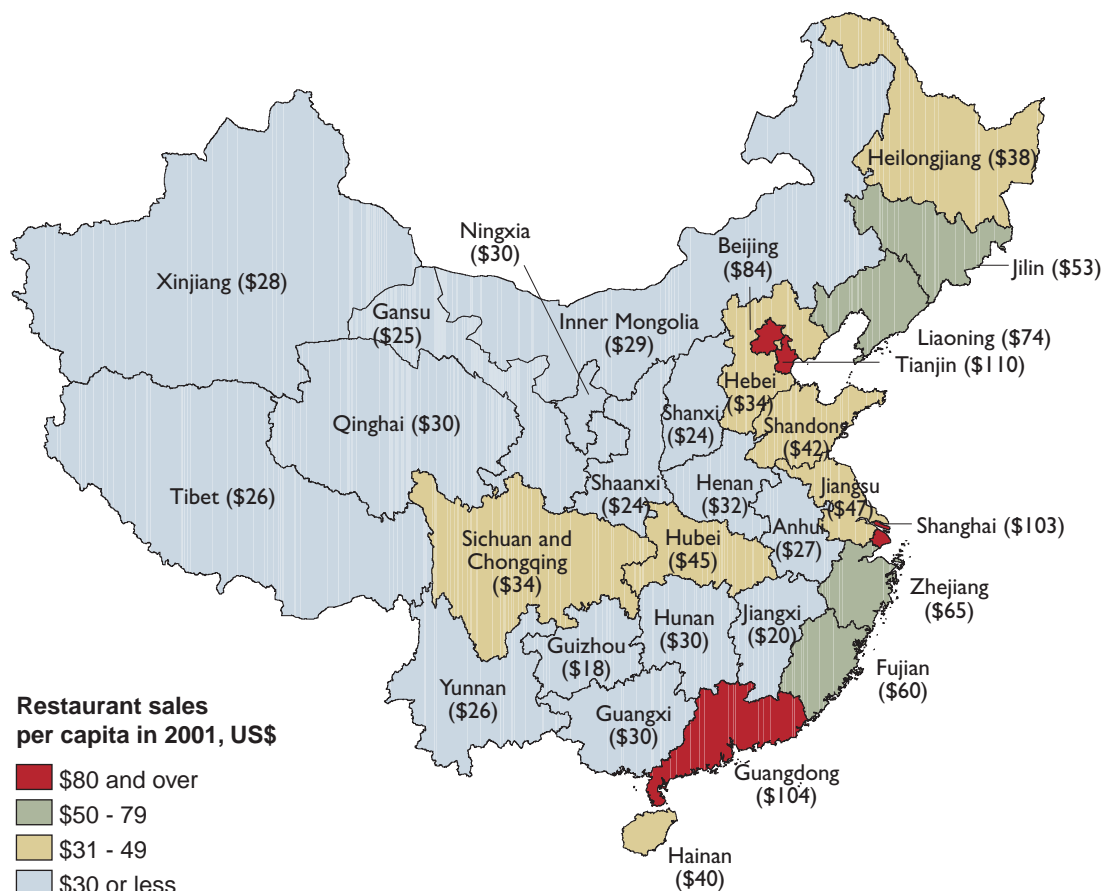
Percent of U.S. Hispanics



Source: U.S. Census Bureau.

On the Map

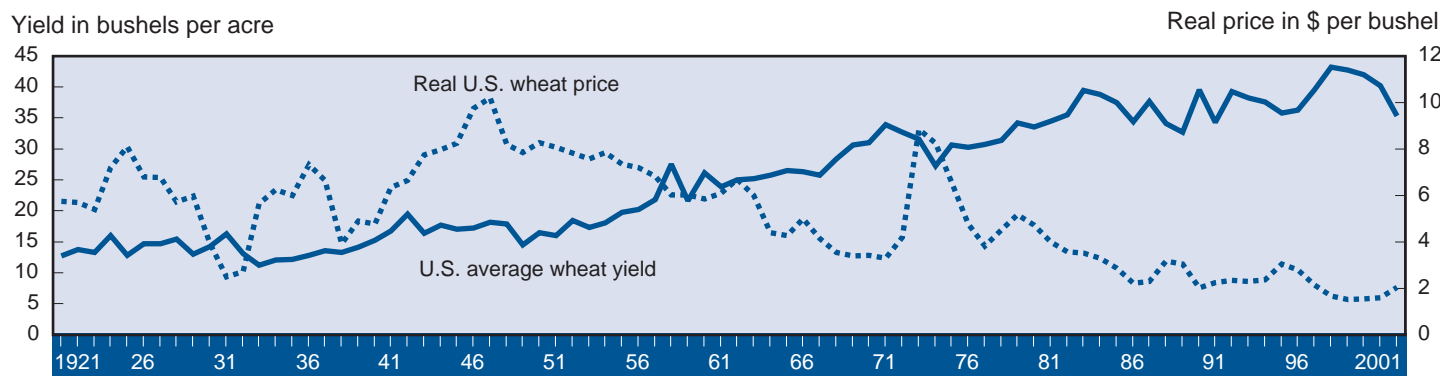
Restaurants are booming in China, with sales rising an average of 16.5 percent annually from 1996 to 2001, about double the rate of growth in all retail sales. Per capita restaurant sales were highest—over \$100—in some of China's richest regions along the coast—Guangdong Province and the Shanghai and Tianjin municipalities—where 2001 per capita urban incomes ranged from \$1,000 to \$1,500 per year. In contrast, per capita restaurant sales were between \$20 and \$30 in most of China's central and western provinces, which have lower urban per capita incomes ranging from \$650 to \$850. Most residents of central and western provinces live in rural areas where incomes are even lower and restaurants are less common.



Source: *China Statistical Yearbook 2002*, published by China National Bureau of Statistics.

In the Long Run

The real U.S. price of wheat has been trending downward since the late 1940s, while U.S. wheat yields have been rising due to improved varieties and cultivation practices. The declining real price reflects global supply increasing more rapidly than global demand despite income and population growth around the world.



Real wheat prices were estimated by deflating nominal prices by the Consumer Price Index.

Source: Consumer Price Index comes from Haver Analytics and Bureau of Labor Statistics.